UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/564,536	01/12/2006	Willem M. J. M. Coene	NL 031212	3482	
	24737 7590 03/31/2009 PHILIPS INTELLECTUAL PROPERTY & STANDARDS			EXAMINER	
P.O. BOX 3001			PENDLETON, DIONNE		
BRIARCLIFF	RCLIFF MANOR, NY 10510		ART UNIT	PAPER NUMBER	
			2627		
			MAIL DATE	DELIVERY MODE	
			03/31/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/564,536	COENE ET AL.
Office Action Summary	Examiner	Art Unit
	DIONNE H. PENDLETON	2627
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLEWHICHEVER IS LONGER, FROM THE MAILING ID.  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statuly Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION  .136(a). In no event, however, may a reply be tird  d will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 12.	is action is non-final. ance except for formal matters, pro	
Disposition of Claims		
4)  Claim(s) 1-19 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5)  Claim(s) is/are allowed.  6)  Claim(s) 1-14 and 16-19 is/are rejected.  7)  Claim(s) 15 is/are objected to.  8)  Claim(s) are subject to restriction and/  Application Papers  9)  The specification is objected to by the Examin 10)  The drawing(s) filed on 1/12/2006 is/are: a)	awn from consideration.  for election requirement.  ner.	the Examiner.
Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	ction is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the priority documer application from the International Burea * See the attached detailed Office action for a lis	nts have been received. nts have been received in Applicati ority documents have been receive au (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail D: 5)  Notice of Informal F 6)  Other:	ate

#### **DETAILED ACTION**

#### **Drawings**

1. Figures 10A and 10B should be designated by a legend such as --Prior Art-because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claim 18** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 18 is drawn to a "computer program" *per se*, therefore, fail(s) to fall within a statutory category of invention.

A claim directed to a computer program itself is non-statutory because it is not:

A process occurring as a result of executing the program, or

A machine programmed to operate in accordance with the program, or

Application/Control Number: 10/564,536 Page 3

Art Unit: 2627

A manufacture structurally and functionally interconnected with the program in a manner which enable the program to act as a computer component and realize its functionality, or

A composition of matter.

See MPEP § 2106.01. Data structures not claimed as embodied in computer readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

# Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites "method of determining write parameters for recording information on a record carrier, *in particular as claimed in claim 1"*. The phrase "in particular" makes the claim unclear whether claim 4 is actually limited to the steps in claim 1, i.e., fails to distinctly recite those features to be regarded as the invention. Correction is required. Claims 5-13 are similarly rejected as they depend from claim 4 and therefore have the limitations of claim 4 incorporated therein.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 14, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chandler (EP 0484132A2) in view of Kraemer (US 6,947,363).

# Regarding claims 1,14,16,17, 18, and 19,

Chandler teaches a device which operates according to a method, for reproducing/recording information (Fig. 10), said information being in the form of a multi-dimensional channel data stream to be recorded as a channel band of at least two

symbol rows one-dimensionally evolving along a first direction and aligned with each other along a second direction (figure 1), the information being in the form of a symbol unit (Figure 5A) comprising a central symbol and a number of neighboring symbols of which some are located on the same symbol row as the central symbol and others are located on neighboring symbol rows, and further wherein the information is determined under joint consideration of (i) the symbol value of the central symbol of the symbol unit; (ii) the symbol values of the neighboring symbols of the symbol unit located in the same symbol row as the central symbol of the symbol unit; and (iii) the symbol values of neighboring symbols of the symbol unit located in the symbol rows that are neighboring the symbol row of the central symbol of the symbol unit (column 5, lines 42-50 and column 6, lines 44-45 disclose that the position of the symbols operate to encode information wherein the symbols are hexagonal in formation thereby corresponding to the joint consideration of (i)-(iii) as claimed).

Chandler fails to expressly teach that the symbol units are on a record carrier and are used for determining write parameters for recording information on a record carrier.

Kraemer teaches a method/device for acquiring information from a record carrier (column 12, lines 45-50) having symbol units thereon by way of determining signal intensity, corresponding at least in part to "write parameters", as a function of a central symbol unit and surrounding symbol units (see column 3, lines 66-column 4, line 3; and column 8, lines 15-20).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Chandler and Kraemer, for the purpose enabling the encoding of information in higher densities on a record carrier.

## Regarding claim 2,

Kraemer teaches that said write parameters are determined by use of a parameter table containing the write parameters for all possible classes of symbol units, from which the write parameters for recording a pit-symbol of the symbol unit are selected according to the actual symbol unit (in column 4, lines 4-15, Kraemer discloses an array of signal intensities for use in extracting information wherein said information is extracted as a function of spacing between symbol units).

## Regarding claim 3,

Kraemer teaches that said write parameters of said symbols are signal intensities, which correspond at least in part to "the power level of a single write pulse".

#### Allowable Subject Matter

5. Claims 4-13 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIONNE H. PENDLETON whose telephone number is (571)272-7497. The examiner can normally be reached on 10:30-7:00 M-F.

Application/Control Number: 10/564,536

Art Unit: 2627

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dionne H Pendleton/ Examiner, Art Unit 2627

/Wayne Young/ Supervisory Patent Examiner, Art Unit 2627